

Intermediate Algebra B
7.2A Properties of Exponents

Name _____
Hour _____

Simplify the following expressions using the properties of exponents.

1. $x^3 \cdot x^{-1} \cdot x^5$

2. $(3x^2y^4)^3$

3. $(a^{-2}bc^3)(a^3b^{-1}c)$

4. $(2xy^3z)^2(3x^2z^4)$

5. $(4a^3)^{-2}$

6. $(-2x^0y)^3$

7. $\frac{5xy^3}{15x^3z}$

8. $\frac{6x^{-3}y}{3y^{-2}}$

9. $\left(\frac{x}{2}\right)^3$

10. $6x^{-2}y$

11. $\frac{-4mn^2}{3m^5n^7}$

12. $(4xyz)^0$